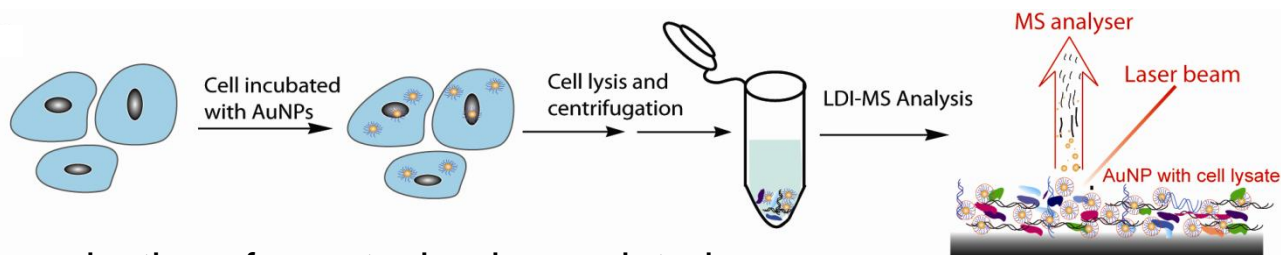
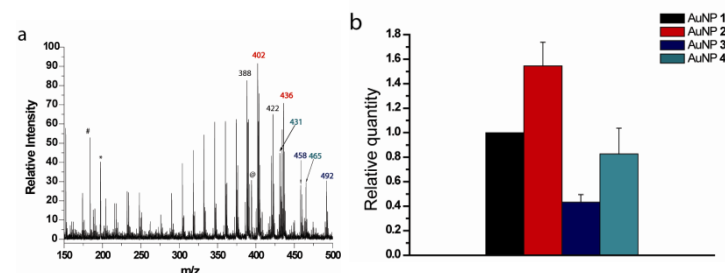
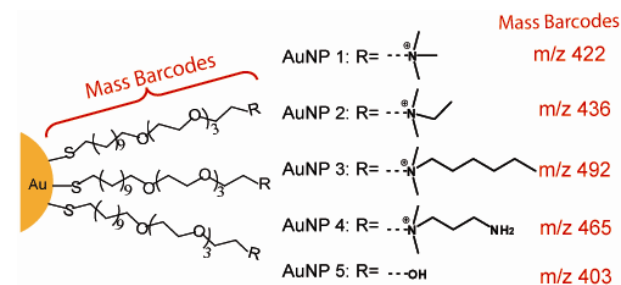


# Multiplexed Screening of Cellular Uptake of Gold Nanoparticles Using Laser Desorption/Ionization Mass Spectrometry (LDI-MS)



With the increased production of nanotechnology-related products and the inevitable release of some of these materials into the environment, nanoparticle uptake by living organisms in the environment is an area of growing interest. CHM scientists have developed a rapid and efficient means for tracking cellular uptake of functionalized gold nanoparticles using the gold core to greatly facilitate ligand ionization. These ligands act as mass barcodes that allow many particles to be followed simultaneously. This method will provide direct access to bio-distribution data: *in vivo* studies using fish (Japanese medaka) are underway.



4 particles tracked simultaneously

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